

# MEMORANDUM

Agenda Item 15(D)1

To: Honorable Chairman Bruno A. Barreiro, and

Members, Board of County Commissioners

Date: December 4, 2007

From: Harvey Ruvin, Clerk

Circuit and County Courts

Subject: Appointment of Members

to the Land Acquisition Selection Committee

Kay Sullivan, Director Clerk of the Board Division

Please select one nominee from each group listed on the attached ballot to fill two (2) vacancies on the Land Acquisition Selection Committee.

The Land Acquisition Selection Committee has seven regular members and one alternate. There are currently two (2) vacancies on the board. In accordance with Section 24A-7 (4) and 24A-12 (2)-(4) of the Miami-Dade County Code, the County Manager shall submit to the Board of County Commissioners a list of qualified nominees from which a replacement can be selected to fill each vacancy.

County Manager George Burgess' memorandum dated November 1, 2007, as well as resumes and letters of recommendations for all members have been attached for your review.

KS: sm Attachments

# COUNTY ADVISORY BOARD BALLOT Miami-Dade County, Florida

# **December 4, 2007**

# LAND ACQUISITION SELECTION COMMITTEE

(Regular Seat) APPOINTMENT TO REPLACE MARION GLENN Vote ( ) for One	
Michael Ross, Ph.D.	
R. Stephen Mahoney	
	-
(Alternate Seat) APPOINTMENT TO REPLACE WARREN ZEILLER Vote ( v ) for One	
_ynette Cardoch, Ph.D.	
Patricia Phares	
mmissioner	



#### MEMORANDUM

TO:

Honorable Harvey Ruvin

Clerk of the Courts

DATE: November 1, 2007

FROM:

George Burgess

County Manager

SUBJECT:

Land Acquisition Selection Committee

Appointments

The County Advisory Board, the Land Acquisition Selection Committee (LASC), has seven regular members and one alternate. Currently, there are two vacancies on the board: a regular member's seat and an alternate member's seat. As required by Chapter 24-50, I am hereby submitting two nominees for these seats. Chapter 24-50.6 also provides that preference be given to candidates who have a record of service in environmental or civic affairs in Dade County and who have been recommended by one or more bona fide environmental, civic or professional organizations.

The nominees for the regular member's seat are:

- 1. Michael Ross, Ph.D 23440 SW 120 Ave, Princeton.
- 2. R. Stephen Mahoney, 444 NE 102 Street, Miami Shores.

Dr. Ross is an Associate Professor, Dept. of Environmental Studies, Florida International University and has published and taught extensively on south Florida's wetlands and uplands. He is recommended by The Nature Conservancy.

Mr. R. Stephen Mahoney is an adjunct professor at Johnson & Wales and Barry University, and is recommended by the Sierra Club – Miami Group.

The nominees for the alternate member's seat are:

- 1. Lynette Cardoch, Ph.D., 2124 SW 25 Terrace, Miami.
- 2. Patricia Phares, 17615 SW 119 Avenue, Miami.

Dr. Cardoch works as the Supervising Scientist for MWH Americas, Inc., and has experience working in wetland and coastal ecosystems and has published research on these topics. She has been recommended by the South Florida Association of Environmental Professionals. Ms. Phares has recently retired as a statistician from the National Oceanographic and Atmospheric Agency. She has been recommended by the Florida Native Plant Society.

The nominee's resumes and letters of recommendation are attached. Please prepare schedule the appointments for the County Commission agenda as soon as possible.

# CURRICULUM VITAE of DR. MICHAEL S. ROSS

(305) 348-1420 (work); (305) 781-4986 (cell) rossm@fiu.edu

#### **EDUCATION**

1987-1988:	University of Vermont Law School, So. Royalton, VT, USA. Masters of Science in Law.
	Emphasis on environmental law and natural resource policy

1976-1982:	Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA. Ph.D. in Silviculture and Forest Ecology, especially forest biology, soils, and hardwood stand
	dynamics.

1974-1976:	Utah State University, Logan, Utah, USA. Masters of Forestry. Emphasis in botany,
	soils, and forest management.

1966-1970:	Muhlenberg College, Allentown, Pa., USA.	Bachelor of Science (	Natural Sciences)	).
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#### WORK EXPERIENCE

2006 - present	Associate Professor, Department of Environmental Studies, Florida International University
2002 - present	Associate Research Scientist, Southeast Environmental Research Center, Florida International University
1993 - 2002	Assistant Research Scientist, Southeast Environmental Research Center, Florida International University.
1988 - 1993	Research Scientist and Principal Investigator, Florida Keys Terrestrial Ecosystem Study, Ecosystem Research Unit, National Audubon Society, Tavernier, FL.
1987:	Teaching Assistant and independent investigator, University of Michigan Biological Station. Assist in plant ecology courses, conduct research on growth and establishment of eastern white pine.

# 1986-1987: Research Associate, Department of Forestry, Michigan Tech University, Houghton, MI. Analyze and synthesize data from recovery program for endangered roundleaf birch (Betula uber Ashe).

1983-1986:	Post-doctoral Research Fellow, Dept. of Botany, University of Alberta, Edmonton,
	All Colonia, Editionion,
	Alberta, Canada. Director of Hondo Research Laboratory. Multi-disciplinary research
	on aspects of boreal forest ecology.
	on aspects of borear forest ecology.

#### THESES AND DISSERTATIONS

The Control of Germination, with Emphasis on the Role of Oxygen. Master's Thesis, Utah State University, 1976.

Oak Regeneration after Clearcutting on Steep Slopes in the Ridge and Valley Province of Southwest Virginia. Ph.D. Dissertation, VPI&SU, 1982.

#### PEER-REVIEWED PUBLICATIONS

- Koptur, S., H. Liu, J. R. Snyder, M. S. Ross, and C. K. Borg. Impact of an endangered animal species on an imperiled plant community: Key Deer grazing after fire in lower Florida Keys pine rockland.. Conservation Biology (submitted September 2007).
- Graf, M-T, G. L. Chmura, M. Schwadron, M. S. Ross, and P. A. Stone. An enigmatic mineralized layer in Everglades tree island peats. EOS (submitted September 2007).
- Timilsina, N., M.S. Ross and J.T. Heinen. 2007. A community analysis of Sal (Shorea robusta) forests in the Western terai of Nepal. Forest Ecology and Management 241: 223-234.
- Sah, J.P., M.S. Ross, J.R. Snyder, S. Koptur and H.C. Cooley. 2006. Fuel loads, fire regimes, and post-fire fuel dynamics in Florida Keys pine forests. International Journal of Wildland Fire 15: 463-478.
- Jones, D.T., J.P. Sah, M.S. Ross, S.F. Oberbauer, B. Hwang, and K. Jayachandran. 2006. Responses of twelve tree species common in Everglades tree islands to simulated hydrologic regimes. Wetlands 26(3): 830-844.
- Bazante, J.F., G. Jacobi, H.M. Solo-Gabriele, D. Reed, S. Mitchell-Bruker, D. Childers, L. Leonard and M. Ross. 2006. Hydrologic measurements and implications for tree island formation in Everglades National Park. Journal of Hydrology 329: 606-619.
- Ross, M.S., S. Mitchell-Bruker, J.P. Sah, S. Stothoff, P.L. Ruiz, D.L. Reed, K Jayachandran and C.L. Coultas. 2006. Interaction of hydrology and nutrient limitation in the Ridge and Slough landscape of the southern Everglades. Hydrobiologia 569: 37-59 (DOI 10.1007/s10750-006-0121-4).
- Armentano, T.V., J.P. Sah, M.S. Ross, D.T. Jones, H.C. Cooley, and C.S. Smith. 2006. Rapid responses of vegetation to hydrological changes in Taylor Slough, Everglades National Park, Florida, USA. Hydrobiologia 569: 293-309 (DOI 10.1007/s10750-006-0138-8).
- Gaiser, E.E., A. Zafiris, P.L. Ruiz, F.A.C. Tobias, and M.S. Ross. 2006. Tracking rates of ecotone migration due to salt-water encroachment using fossil mollusks in coastal south Florida. Hydrobiologia 569: 237-257 (DOI 10.1007/s10750-006-0135-y).
- Leonard, L., A. Croft, D. Childers, S. Mitchell-Bruker, H. Solo-Gabriele, and M.S. Ross. 2006. Characteristics of surface flows in the Ridge and Slough landscape of Everglades National Park: implications for particulate transport. Hydrobiologia 569: 5-22(DOI 10.1007/s10750-006-0119-y).
- Chmura, G.L., P.A. Stone and M.S. Ross. 2006. Non-pollen microfossils in Everglades sediments. Review of Paleobotany and Palynology 141: 103-119.
- Ross, M.S., P.L. Ruiz, J.P. Sah, D.L. Reed, J. Walters, and J.F. Meeder. 2006. Early stand development following disturbance along a mangrove forest productivity gradient in South Florida. Plant Ecology 185 (2): 283-297 (DOI 10.1007/s11258-006-9104-9).
- Simard, M., V. Monroy-Rivera, K. Zhang, M. Ross, P. Ruiz, R. Twilley, E. Rodriguez and E. Castaneda. 2006. Mapping height and biomass of mangrove forests in the Everglades National Park with SRTM elevation data. Photogrammetric Engineering and Remote Sensing 72 (3): 299-311.
- Gaiser, E.E., A. Wachnicka, P.L. Ruiz, and M.S. Ross. 2005. Diatom indicators of ecosystem change in subtropical coastal wetlands. pp. 127-144 In: Estuarine Indicators. S. Bartone, ed. CRC Press. 531 pp.
- Liu, H., E.S. Menges, J.R. Snyder, S. Koptur, and M.S. Ross. 2005. Effects of fire intensity on vital rates of an endemic herb of the Florida Keys. Natural Areas Journal. 25: 71-76.



- Sah, J.P., M.S. Ross, S. Koptur, and J.R. Snyder. 2004. Estimating biomass of broadleaved woody plants in the understory of Florida Keys pine forests. Forest Ecology and Management 203: 319-329.
- Ross, M.S., D.L. Reed, J.P. Sah, P.L. Ruiz, and M.T. Lewin. 2003. Vegetation:environment relationships and water management in Shark Slough, Everglades National Park. Wetlands Ecology and Management 11: 291-303.
- Lockwood, J.L., M.S. Ross, and J.P. Sah. 2003. Smoke on the water: the interplay of fire and water flow on Everglades restoration. Frontiers in Ecology and Environment 1(9): 462-468.
- Ross, M.S., C.L. Coultas, and Y.P. Hsieh. 2003. Soil-productivity relationships and organic matter turnover in dry tropical forests of the Florida Keys. Plant and Soil 253 (2): 479-492.
  - Armentano, T.V., D.T. Jones, M.S. Ross, and B.W. Gamble. 2002. Vegetation pattern and process in tree islands of the southern Everglades and adjacent areas. Pp 225-281 *In*: van der Valk, A. and Sklar, F. eds. *Tree Islands of the Everglades* Kluwer Academic Publishers, Dordrecht. 541 pp.
  - Ross, M.S., E.E. Gaiser, J.F. Meeder, and M.T. Lewin. 2002. Multi-taxon analysis of the "white zone", a common ecotonal feature of South Florida coastal wetlands. Pp. 205-238 *In*: The Everglades, Florida Bay, and Coral Reefs of the Florida Keys. J. W. Porter and K.G. Porter, eds. CRC Press, Boca Raton, FL, USA. 1064 pp.
  - Ross, M.S., M. Carrington, L.J. Flynn, and P.L. Ruiz. 2001. Forest succession in tropical hardwood hammocks of the Florida Keys: effects of direct mortality from Hurricane Andrew. Biotropica 33 (1): 23-33.
  - Ross, M.S., P.L. Ruiz, G.J. Telesnicki, and J.F. Meeder. 2001. Estimating aboveground biomass and production in mangrove communities of Biscayne National Park, Florida (USA). Wetlands Ecology and Management. 9: 27-37.
  - Fry, B., A. L. Bern, M. S. Ross, and J. F. Meeder. 2000. δ<sup>15</sup>N studies of nitrogen use by the red mangrove, *Rhizophora mangle* L. in South Florida. Esturarine and Coastal Shelf Science 50: 291-296.
  - Ross, M.S., J.F. Meeder, J.P. Sah, P.L. Ruiz, and G.J. Telesnicki. 2000. The Southeast Saline Everglades revisited: 50 years of coastal vegetation change. Journal of Vegetation Science 11 (1): 101-112.
  - Ross, M., J. O'Brien and L. Sternberg. 1994. Sea level rise and the decline of Pine Rockland forests in the Lower Florida Keys. Ecological Applications 4 (1): 144-156.
  - Meeder, J.F., M.S. Ross, and R.G. Ford. 1993. Mangrove expansion in south Florida under conditions of an accelerating rate of sea level rise: results of conceptual, depositional and spatial models. *In* Proceedings of the Hilton Head South Carolina (USA) International Coastal Symposium. P. Brunn, ed. Volume 2, pp. 431-445.
  - Ross, M., J. O'Brien, and L. Flynn. 1992. Ecological site classification of Florida Keys terrestrial habitats. Biotropica 24:488-502.
  - Ish-Shalom, N. L. Sternberg, M. Ross, J. O'Brien, and L. Flynn. 1992. Water utilization of tropical hardwood hammocks of the Lower Florida Keys. Oecologia 92:108-112.
  - Sternberg, L.d.S.L., N. Ish-Shalom-Gordon, M.S. Ross, and J.J. O'Brien. 1991. Water relations of coastal plant communities near the ocean/freshwater boundary. Oecologia 88:305-310.
  - Ross, M.S. and G.H. La Roi. 1990. Aboveground biomass allocation by four understory vascular plant species in central Alberta jack pine, *Pinus banksiana*, forests. Can. Field. Nat. 104(3):394-402.

Tworkoski, T.J., M.S. Ross, and G.M. Hopper. 1990. Analysis of chestnut and scarlet oak stump sprout growth. Can. Jour. For. Res. 20:112-116.

Ross, M.S., L.L.Flanagan, and G.H. La Roi. 1986. Structure and function of boreal forest ecosystems. IV. Seasonal and successional changes in light characteristics. Can. Jour. Bot. 64: 2792-2799.

Ross, M.S., T.L. Sharik, and D. Wm. Smith. 1986. Oak regeneration on steep slopes in southwest Virginia. Forest Sci. 32(1): 157-169.

Sharik, T.L., M.S. Ross, and G.M. Hopper. 1983. Early fruiting in chestnut oak. Forest Sci. 29(2): 221-224.

Sharik, T.L., M.S. Ross, and A.H. Price. 1983. A micro-borer for extracting increment cores from small stems of woody plants. Forest Sci. 29(2): 329-331.

Ross, M.S., T.L. Sharik, and D. Wm. Smith. 1982. Species and site relationships among oak regeneration types after clearcutting in the Virginia Ridge and Valley. *In* Proceedings of the Second Biennial Southern Silvicultural Research Conference, Atlanta, Ga. USDA For. Serv. Gen. Tech. Report SE-24. pp. 151-156.

Ross, M.S., T.L. Sharik, and D. Wm. Smith. 1982. Age-structure relationships of tree species in an Appalachian oak forest in southwest Virginia. Bull. Torr. Bot. Club 109(3): 287-298.

#### NON-TECHNICAL PUBLICATIONS

Reviw of Coastally Restricted Forests, A. D. Laderman, ed. Quarterly Review of Biology 75 (4): 482-483. 2000.

An action plan to conserve the native plants of Florida. Ross, M. S. *for* the Center for Plant Conservation. November 1995. 41 pp. + appendices.

South Florida terrestrial ecosystem home page: http://www.fiu.edu/~serp1/eco/index.htm

#### **EXTENDED ABSTRACTS**

Airborne Laser Mapping of Mangroves on the Biscayne Bay Coast, Miami, Florida. K. Zhang, P.A. Houle, M.S. Ross, P.L. Ruiz & M. Simard. IGARSS 2006. Denver CO.

Use of airborne LIDAR for the assessment of landscape structure in the pine forests of Everglades National Park. P.A. Houle, K. Zhang, M.S. Ross & M. Simard. IGARSS 2006. Denver CO.

Using Shuttle radar topography mission elevation data to map mangrove forest height in the Caribbean. M. Simard, K. Zhang, M.S. Ross, V.H. Rivera-Monroy, E. Castaneda-Moya & R Twilley. IGARSS 2006. Denver CO.

#### MAJOR TECHNICAL REPORTS

Effect of hydrologic restoration on the habitat of the Cape Sable Seaside Sparrow. 2007. Jay P. Sah, Michael S. Ross, Pablo L. Ruiz David T. Jones, Rafael Travieso, Susana Stoffella, Nilesh Timilsina, Erin Hanan, Hillary Cooley, James R. Snyder and Beyte Barrios. Annual Report of 2005-06. 49 pp.

Tree islands in Everglades landscapes: current status, historical changes, and hydrologic impacts on population dynamics and moisture relations. 2007. José L. Espinar, Michael S. Ross, Steve Oberbauer,

Pablo L. Ruiz, Daniel Gomez, Xin Wang, Leonel Sternberg, Amartya Saha, Jay P. Sah, Susana Stoffella, Michael Kline, Erin J. Hanan, Brooke Shamblin, David T. Jones and Rafael Travieso. Annual Report of 2006. 52 pp.

Vegetation Classification for South Florida Natural Areas. 2006. K. Rutchey, T.N. Schall, R.F. Doren, A. Atkinson, M.S. Ross, D.T. Jones, M. Madden, L. Vilchek, K.A. Bradley, J.R. Snyder, J.N. Burch, T. Pernas, B. Witcher, M. Pyne, R. White, T.J. Smith III, J. Sadle, C.S. Smith, M.E. Patterson, and G.D. Gann. United States Geological Survey, Open-File Report 2006-1240. 142 p.

Developing ecological criteria for prescribed fire in south Florida pine rockland ecosystems. J. R. Snyder, M. S. Ross, S. Koptur & J. P. Sah. 2006. USGS Open File Report OF 2006-1062. 109 pp.

Tree islands in Everglades landscapes: current status, historical changes, and hydrologic impacts on population dynamics and moisture relations. 2006. MS Ross, S Oberbauer, PL Ruiz, N Timilsina, D Gomez, JP Sah, S Stoffella & LdSL Sternberg. Annual Report of 2005. South Florida Natural Resource Center, Everglades National Park, Homestead, FL. 22 pp.

Water flow through Coastal Wetlands. E. E. Gaiser and M. S. Ross. 2005. Final Report to Everglades National Park. 74 pp.

Large-scale assessment of mangrove landscape changes using enhanced shuttle radar topography mission data, LiDAR data, and ground observations. 2005. K Zhang, MS Ross & PL Ruiz. Annual Report of 2004. 25 pp + 22 figures.

Effect of habitat restoration on the habitat of the Cape Sable seaside sparrow. 2005. MS Ross, JP Sah, PL Ruiz, DT Jones, H Cooley, R Travieso, JR Snyder & S Robinson. Annual Report of 2004. 35 pp.

Tree islands in the Shark Slough landscape: interactions of vegetation, hydrology, and soils. 2004. M.S. Ross (ed.), K. Jayachandran, P.L. Ruiz, P. Stone, J.P. Sah, D.L. Reed, D.T. Jones (ed.), S. Oberbauer, B. Hwang, J. Walters, H.C. Cooley, D. Stockman, and S. Sah. 185 pp + 139 figures. Final Report to Everglades National Park, Critical Ecosystem Science Initiative, Study Number 00075. August 2004.

Vegetation dynamics in Everglades marshes, with emphasis on Taylor Slough. M. S. Ross, J. P. Sah, T. V. Armentano, D. T. Jones, H. C. Cooley, and C. S. Smith. 31 pp. Contribution to Everglades National Park for Report to Congress on Interim Operation Plan. October 2003.

Effect of habitat restoration on the habitat of the Cape Sable seaside sparrow. MS Ross, JP Sah, PL Ruiz, DT Jones, H Cooley, R Travieso, JR Snyder & C Schaeffer. Annual Report of 2003. 37 pp.

The L-31E Surface Water Rediversion Pilot Project Final Report: implementation, results, and recommendations. Ross, M.S., J.F. Meeder, E. Gaiser, P.L. Ruiz, J.P. Sah, D.L. Reed, J. Walters, G.T. Telesnicki, A. Wachnicka, M. Jacobson, J. Alvord, M. Byrnes, C. Weekley, Z.D. Atlas, M.T. Lewin, B. Fry, and A. Renshaw. April 2003. 183 pp. (http://www.fiu.edu/~serp1/projects/131e/2003fr.exe).

Assessment of marsh vegetation responses to hydrological restoration in Shark Slough, Everglades National Park. Ross, M. S., P. L. Ruiz, D. L. Reed, K. Jayachandran, J. P. Sah, and M. T. Lewin. Final Report *for* Everglades National Park. June 2001. 43 pp. + 27 figures.

The L-31E surface water rediversion pilot project: Phase 1 Final Report. Ross, M.S., J.F. Meeder, P.L. Ruiz, A. Renshaw, G.T. Telesnicki, J. Alvord, M. Jacobson, M. Byrnes, Z.D. Atlas, D. Reed, B. Fry, M.T. Lewin, and C. Weekley. *for* the South Florida Water Management District. March 1999. 153 pp.

Vegetation analysis in the C-111/Taylor Slough basins. Meeder, J. F., M. S. Ross, G. Telesnicki, P. L. Ruiz, and J. P. Sah. *for* the South Florida Water Management District. November 1996. 150 pp. + appendices.

A study of the distribution of several South Florida endemic plants in the Florida Keys. Ross, M. S. and P. L. Ruiz. *for* The U. S. Fish and Wildlife Service. May 1996. 45 pp. + appendices.

Terrestrial ecosystems of the Crocodile Lakes National Wildlife Refuge: the effects of Hurricane Andrew. Ross, M. S., J. F. Meeder, G. Telesnicki, and C. Weekley. *for* Department of Interior, U. S. Fish and Wildlife Service. May 1995. 156 pp + 2 appendices.

The Curry Hammock Tract of the Middle Florida Keys: terrestrial ecosystems and recommendations for their management. Ross, M. and J. O'Brien *for* The Nature Conservancy and Florida Department of Natural Resources. February 1992. 35 pp.

Vegetation and landscape ecology of central Big Pine Key. Ross, M., J. O'Brien, and L. Flynn. For The Nature Conservancy and the South Florida Water Management District. February 1992. 62 pp.

Effects of hydrologic factors on the vegetation of Big Pine Key. Ross, M.S. For The Nature Conservancy. November 1989. 9 pp.

Integrated final report on ecological monitoring research in the Athabasca Oil Sands and Hondo-Lesser Slave Lake study areas during the period 1981-1984. La Roi, G.H., M.S. Ross, and R.A. Ellis. *For* Research Management Division, Alberta Environment (RMD-80/35A). 329 pp.

Structural dynamics of boreal forest ecosystems on three habitat types in the Hondo-Lesser Slave Lake area of north central Alberta in 1983. Ross, M.S. and G.H. La Roi. *For* Research Management Division, Alberta Environment (RMD-80/35A) and Alberta Environmental Research Trust. Oct. 1984. 147 p.

Structural dynamics of boreal forest ecosystems on three habitat types in the Hondo-Lesser Slave Lake area of north central Alberta in 1982. La Roi, G.H., M.S. Ross, and M. Ostafichuk. For Research Management Division, Alberta Environment (RMD-80/35A) and Recreation, Parks and Wildlife Foundation. May 1983. 93 p.

#### PAPERS PRESENTED

- Vegetation dynamics in habitats of 4 endangered birds in the Florida Everglades. M. S. Ross and J. P. Sah. Everglades Avian Ecology Forum. Florida International University. August 2007.
- Hurricanes, fire, and coastal pine forests in a rising sea: the Florida Keys. M. S. Ross, K. Zhang, J. P. Sah, R. G. Ford, and J. J. O'Brien. Ecological Society of American Annual Meeting. San Jose CA. August 2007.
- Sea level rise and the decline of pine rockland forests in the lower Florida Keys. M. S. Ross, K. Zhang, J. P. Sah, J. J. O'Brien & R. G. Ford. Conservation of the Florida Keys pine rocklands: learning from our past to sustain for the future. Big Pine Key, FL. March 2007.
- Tree islands in Everglades landscapes: a study of inter-regional variation and forest moisture relations. M.S. Ross, J.P. Sah, P.L. Ruiz, S. Oberbauer & L. Sternberg. 2006 Greater Everglades Ecosystem Restoration Conference. Lake Buena Vista, FL. June 2006.
- Landscape structure in the southern Everglades and its implications for restoration. M.S. Ross, P.L. Ruiz, J. P. Sah, K. Jayachandran, S. Mitchell-Bruker and S. Stothoff. Society of Wetland Scientists 26th Annual Meeting, Savannah, Georgia. June 2005.
- Nutrient relationships in the "ridge-and-slough" vegetation mosaic of the southern Everglades, Florida, USA. M.S. Ross, P.L. Ruiz, K. Jayachandran, C.L. Coultas, and J.P. Sah. International Association of Vegetation Science, 47th Annual Meeting. Kailua-Kona, Hawai'i, USA. July 2004.

- Vegetation dynamics in Everglades marshes, with emphasis on Taylor Slough. M. S. Ross, J. P. Sah, T. V. Armentano, D. T. Jones, H. C. Cooley, and C. S. Smith. IOP Workshop, Everglades National Park, October 2003.
- Reduced freeze incidence associated with global warming may promote mangrove encroachment in southeastern coastal marshes. Ecological Society of America. Savannah GA. August 2003.
- The response of Everglades tree species to simulated hydrologic regimes: an experimental study. Ross, M.S., D.T. Jones, B. Hwang, J. Walters, S. Oberbauer, and K. Jayachandran. Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay ecosystems. Palm Harbor, FL. April, 2003.
- Vegetation restoration in Biscayne Bay Coastal Wetlands. BBCW Project Development Team workshop. Miami, FL. October 2002.
- Developing ecological performance measures for Everglades tree islands. Natural Areas Association Conference 2002. Asheville, NC. October 2002.
- Biomass and fuel loads associated with hardwoods in the understory of Florida Keys pine forests. Natural Areas Association Conference 2002 (poster). Asheville, NC. October 2002.
- Mound and ridge tree-islands in the Everglades peatland. Gleason, P., P. A. Stone, and M. Ross. Geological Society of American Annual Meeting. October 2002. Denver, CO. GSA Abstracts, Volume 34, Number 6.
- Determining the role of sediment deposition and transport in the formation and maintenance of tree islands in the Florida Everglades. Mitchell-Bruker, S. D. Childers, M. Ross, L. Leonard, H. Solo-Gabriel and S. Stothoff, 2002. American Geophysical Union Spring 2002 Meeting. Washington, D.C.
- Population dynamics of Pinus elliottii var. densa in Everglades National Park: a case for less frequent prescribed fires. Natural Areas Association Conference 2001. Cape Canaveral, FL October 2001.
- The L-31E pilot project: coastal restoration in Biscayne National Park. Natural Areas Association Conference 2001 (poster). Cape Canaveral, FL October 2001.
- Dynamics of "the White Zone", an indicator of coastal wetland condition. Presentation to National Academy of Science Greater Ecosystem Restoration oversight committee (CROGEE). Homestead, FL February 2001.
- Vegetation:environment relationships and water management in Shark Slough, Everglades National Park. Greater Everglades Ecosystem Restoration Science Conference, Naples, FL. December 2000.
- An alternative method for estimating above-ground production in mangrove communities of Biscayne National Park, Florida. Ecological Society of America annual meeting, Snowbird, UT. August 2000.
- The status of four endemic pine rockland herbs in the Florida Keys: implications for long term management. Ecological Society of America annual meeting, Snowbird, UT. August 2000.
- The L-31E surface water rediversion project: coastal wetland ecosystems and some initial treatment results. Florida Bay Science Conference, Key Largo, FL. November 1999.
- Ecological impacts of sea level rise in South Florida. Climate Change and Extreme Events Workshop. Florida International University, Miami, FL. July 1998.
- Integrating ecological criteria into fire management in South Florida rocklands. Pine Rocklands Fire Managers Symposium. Key Largo, FL. December 1997.

- The Southeast Saline Everglades revisited: vegetation and soil changes during the last century. First Annual Meeting of the Walt Dineen Society. Miami, FL. May 1997.
- Water use in mangrove communities of Biscayne National Park, FL. First Annual Meeting of the Walt Dineen Society. Miami, FL. May 1997.
- Nitrogen and phosphorus in the Florida Keys: groundwater-vegetation relationships. 1992 Symposium on Florida Keys Regional Ecosystem, Miami, Florida, November 1992.
- Has 20th Century sea level rise caused the migration of Florida Keys plant communities? Botanical Society of America annual meeting, San Antonio, Texas, August 1991.
- Pineland decline in the Florida Keys. Ecological Society of America annual meeting, San Antonio, Texas, August 1991.
- Subtropical hammock successional trends in North Key Largo, Florida. Ecological Society of America annual meeting, San Antonio, Texas, August 1991.
- Plant community architecture across habitat gradients in the Florida Keys. Ecological Society of America annual meeting, San Antonio, Texas, August 1991.
- Ecological site classification of terrestrial habitats of the Florida Keys. Ecological Society of America annual meeting, Snowbird, Utah, August 1990.
- Fire history and the forest mosaic near Lesser Slave Lake, Alberta. Northwest Scientific Association annual meeting, Cheney, WA, March 1986.
- Stem unit analysis in oak. 7th Forest Tree Physiology Workshop, Raleigh, N.C., 1983.
- Oak regeneration development after clearcutting in the Ridge and Valley province of Virginia. Virginia Academy of Science annual meeting, Norfolk, VA, May 1981.
- Age structure of an Appalachian oak forest. Virginia Academy of Science annual meeting, Charlottesville, VA, May 1980.

#### GRANTS AND CONTRACTS SUBMITTED AND RECEIVED

- 2007. Vegetation mapping in Biscayne National Park. \$16,436 (addendum). DOI-NPS-Everglades National Park and South Florida/Caribbean Cooperative Ecosystem Studies Unit. PI.
- 2007. Developing allometric biomass equations for saplings of tree species common in Everglades tree islands. \$48,750. South Florida Water Management District. PI, with J. Sah.
- 2007. Status and response of endemic pine rockland plants following a storm surge event in the Florida Keys. \$90,250. U.S. Fish and Wildlife Service (not funded). PI.
- 2007. Lower Keys digital terrain model and vegetation analysis for the National Key Deer Refuge. U.S. Fish and Wildlife Service. Co-PI, with Keqi Zhang.
- 2007. Cape Sable seaside sparrow habitat monitoring and assessment project. \$180,278. US Army Corps of Engineers. PI, with J. Sah.
- 2007. Prediction of pine forest changes in the Florida Keys due to sea level rise and storm surge inundation. \$120,000. Department of Energy, National Institute of Climate Change Research. Co-PI, with Keqi Zhang.
- 2006. CERP monitoring and assessment program: monitoring of tree island condition in the southern Everglades. \$75,035. South Florida Water Management District.

- 2006. Developing a data-driven classification of south Florida plant communities, Phase I. \$55,318. DOI-NPS-Everglades National Park and South Florida/Caribbean Cooperative Ecosystem Studies Unit. PI, with J. Sah.
- 2006. Vegetation mapping in Biscayne National Park. \$47,762. DOI-NPS-Everglades National Park and South Florida/Caribbean Cooperative Ecosystem Studies Unit.
- 2005. Fuel development and woody plant invasion in Everglades prairies. \$161,974. US Fish & Wildlife Service.
- 2005. CERP monitoring and assessment: marl prairie slough gradients. \$207,000. US Department of Interior, National Park Service, Everglades National Park.
- 2005. Loxahatchee impoundment landscape assessment (LILA): tree island experiments and site management. South Florida Water Management District. \$460,000 over 3 years. Co-PI, with Len Scinto & Rene' Price.
- 2005. Analysis of Everglades fire effects monitoring data. Everglades National Park. \$16,700. PI, with Jay Sah.
- 2005. Determining the hydrologic requirement of aquatic slough vegetation. \$499,600 over 3 years. US Department of Interior. Co-PI, with Jennifer Richards and 3 others.
- 2004. Tree islands in Everglades landscapes: current status, historical changes, and hydrologic impacts on population dynamics and moisture relations. \$535,000 over 3 years. US Department of Interior.
- 2004. A spatial simulation model to predict prairie and marsh vegetation types in the Everglades. \$74,478. US Department of Interior. (Not funded).
- 2004. Documenting the importance of water flow to Everglades landscape structure and sediment transport in Everglades National Park (continuation). \$206,598. US Department of Interior. Co-PI, with Dan Childers.
- 2004. Vegetation mapping in the Biscayne Bay Coastal Wetlands project area. \$145,000. South Florida Water Management District. With Keqi Zhang (Not funded).
- 2003. Effects of hydrologic restoration on the habitat of the Cape Sable Seaside sparrow. U. S. Department of Interior, National Park Service, Everglades National Park. \$192,382. (continuation).
- 2003. Assessment of construction methodologies for wetland restoration of water distribution features in Biscayne National Park. \$50,000. US Department of Interior, National Park Service. With Jack Meeder.
- 2003. Large-scale assessment of mangrove landscape changes using enhanced Shuttle Radar Topography Mission data, LIDAR data, and ground observations. \$199K over 3 years. NASA, via Jet Propulsion Laboratory. With Keqi Zhang.
- 2003. Exploring spatial variation in climate to predict future fuel and fire dynamics in pine rockland ecosystems. \$68K over 3 years. Submitted to Joint Fire Science Program via USDA Forest Service, Southern Forest Experiment Station. (Not funded)
- 2003. Vegetation dynamics in Everglades marshes, with emphasis on Taylor Slough. National Park Service, Everglades National Park. \$8,000.

- 2002. Determining rates and biological consequences of salt-water encroachment in coastal wetlands of Biscayne National Park. U.S. Department of Interior, National Park Service. \$86,760. (with Evelyn Gaiser).
- 2002. Effects of hydrologic restoration on the habitat of the Cape Sable Seaside sparrow. U. S. Department of Interior, National Park Service, Everglades National Park. \$186,728.
- 2001. Documenting the importance of water flow to Everglades landscape structure and sediment transport in Everglades National Park. U. S. Department of the Interior, National Park Service, Biscayne National Park. \$560,000. (with Dan Childers, Sherry Mitchell, Helena Solo-Gabriele, and Lynn Leonard).
- 2001. Water flow through coastal wetlands. U. S. Department of the Interior, National Park Service, Biscayne National Park. \$180,000. (with Evelyn Gaiser).
- 2001. L-31E wetlands and flow monitoring. South Florida Water Management District. \$136,000. (with Jack Meeder and Ron Jones).
- 2000. Everglades National Park tree islands: interactions of hydrology, vegetation, and soils. U. S. Department of Interior, National Park Service, Everglades National Park. \$333,263 (with Steve Oberbauer and Krish Jayachandran).
- 1999. Southern Biscayne Bay watershed historical creek characterization. Florida Center for Environmental Studies. \$74,000. (with Jack Meeder, Evelyn Gaiser, and Rudolf Jaffe).
- 1997. Developing ecological criteria for prescribed fire in South Florida pine rockland ecosystems. U. S. Department of Interior Fire Initiative. \$464,000. (with Suzanne Koptur and Jim Snyder).
- 1996. L-31E flow redistribution monitoring (addition). South Florida Water Management District. \$400,000. (with Jack Meeder).
- 1996. Effects of L-31E flow redistribution on nearshore benthic communities in Biscayne National Park. U. S. National Park Service. \$50,000. (with Jack Meeder).
- 1996. Shark Slough vegetation monitoring. U. S. National Park Service. \$215,000.
- 1995. A study of the distribution of several South Florida endemic plants in the Florida Keys. U. S. Fish and Wildlife Service. \$25,000.
- 1995. Effects of Hurricane Andrew on the upland forests of Biscayne National Park. U. S. National Park Service. \$70,000. (with Jack Meeder).
- 1994. A strategic plan for conservation of Florida plants. Center for Plant Conservation. \$12,000.
- 1993. Effects of Hurricane Andrew on the terrestrial ecosystems of the Florida Keys. John D. and Catherine T. MacArthur Foundation. \$50,000. (with Wayne Hoffman)
- 1993. Effects of Hurricane Andrew on the Crocodile Lakes National Wildlife Refuge. U.S. Fish and Wildlife Service. \$75,000.
- 1993. L-31E flow redistribution monitoring. South Florida Water Management District. \$380,000. (with Jack Meeder).
- 1993. Vegetation analysis of C-111 and Taylor Slough basins. South Florida Water Management District. \$196,000. (with Jack Meeder).

- 1993. Effects of Hurricane Andrew on the distribution of rare plants in south Florida pine rocklands, with emphasis on edaphic factors. U.S. National Park Service. \$84,000. (with Jack Meeder)
- 1992. Terrestrial ecosystems of the Curry Tract, Fat Deer and Long Point Keys, Florida. The Nature Conservancy. \$9,000.
- 1991. Vegetation and landscape ecology of central Big Pine Key. The Nature Conservancy. \$15,000.
- 1989. Ecosystem study of the lower Florida Keys. The Nature Conservancy. \$25,000.

#### **OTHER RESEARCH ACTIVITIES**

Research collaborator, Florida Coastal Everglades LTER.

#### **TEACHING ACTIVITIES**

Graduate Committees directed, Florida International University.

Department of Environmental Studies --- 3 completed (Hillary Cooley, Robin Gray-Urguelles, David Reed), 4 in progress (Erin Hanan, Danielle Ogurcak, Marissa Benigno, Elaine Fontes).

Graduate Committee memberships, Florida International University

Department of Biology --- 6 completed, 3 in progress (Daniel Gomez, John Geiger, Sarah Colby) Department of Environmental Studies --- 9 completed.

Classes taught ---

EVR 4596 (Field Methods in Ecology, Lab) Fall 2006 EVR 5320 (Environmental Resource Management) Spring 2007

Extended lecture series --- Tropical Forest Management (Winter 2000, Winter 2001).

Independent study courses directed, Florida International University --- 7 completed.

Numerous university classroom lectures presented, field trips lead.

Public environmental education lectures --- John Pennekamp Coral Reef State Park, Long Key State

Park, Isaak Walton League of Key Largo, Bent Tree Cub Scout Pack, and others.

Instructor, Silviculture Laboratory, VPI&SU. (1980).

Graduate Teaching Assistantship in Silviculture and Forest Ecology, VPI&SU. (1979-82).

#### **ACADEMIC & PROFESSIONAL SERVICE ACTIVITIES**

South Florida pine rockland working group

Big Pine Key fresh water lens working group

Miami-Dade County Environmentally Endangered Lands Program - Technical Review Team

Everglades conceptual model working groups - mangrove estuary, marl prairie, ridge and slough.

Biscayne Bay Coastal Wetlands working group

Biscayne Bay Partnership Initiative --- Science working group.

Manuscript review for many ecological journals and several book publishers

Member, SERC Policies and Procedures Committee, 2000-2001.

Organizer, SERC Brownbag Seminar Series, 1999-2001.

#### **AWARDS**

FIU Division of Sponsored Research & Training outstanding contribution award, 1996-97

#### PROFESSIONAL MEMBERSHIPS

Natural Areas Association

International Association of Vegetation Science

**Ecological Society of America** 

Association for Tropical Biology

Society of Wetland Scientists

September 2007



April 21, 2006

Ms. Emily Young Miami-Dade County EEL Program Dept. of Environmental Resources Management 33 SW 2 Avenue, Suite PH-2 Miami, Florida 33130-1540

Dear Ms. Young:

I am writing on behalf of The Nature Conservancy in support of Dr. Michael Ross's application to serve Miami-Dade County on the Land Acquisition Selection Committee. Dr. Ross has an outstanding record of engagement with the science and conservation community in south Florida, particularly in Miami-Dade and Monroe Counties. His formal research and informal guidance have contributed substantially, perhaps more than any other scientist, to The Nature Conservancy's efforts to purchase and manage environmentally sensitive lands in this area.

Numerous other non-governmental organizations, government agencies and students have benefited from Dr. Ross's work and insights. His contributions to the Pine Rockland Working Group have been highly valued by all members of the group which includes a number of Miami-Dade County staff. He knows the natural areas of Miami-Dade County intimately and his considerable background in wetland ecology, fire ecology and the study of hurricane impacts on south Florida's natural areas and species could not be better suited to the County's needs. Add to these science credentials Dr. Ross's formal education in environmental law and policy and you have an incredibly well-rounded volunteer for this important position.

I sincerely hope that Dr. Ross will be selected to serve the County Commission on the Land Acquisition Selection Committee. Thank you for your consideration.

Warm regards,

Min M. B.M.

Chris Bergh

Director, The Nature Conservancy – Florida Keys Program

Chairman, Pine Rockland Working Group

# R. Stephen Mahoney

444 NE 102 Street

Miami Shores FL 33138

EMail rsmahoney@bellsouth.net 305 756 1751

Qualifications for Committee Member

# PROFESSIONAL PROFILE

An analytical and goal-oriented individual with practical sales experience reinforced by a strong educational and technical background. A dedicated team player with strong organizational, communication and interpersonal skills. Meets people at all levels and effectively works with others to attain goals in an efficient timely manner.

# AREAS OF EXPERTISE

- \*Teaching
- \*Lab supervision
- \* Technical support/training
- \* Public/client relations
- \* Chemistry/biology
- \* Management
- \* Program development
- \* Administration
- \*PC lab Applications
- \*Marine biology
- \*Environmental PC applications \*Environmental regulations

# SUMMARY OF QUALIFICATIONS

- Taught environmental science, chemistry, biology, oceanography, physical science, marine biology, ecology, zoology and botany to more than 150 students in large to small classes inclusive of curriculum development, performance evaluation, student development, supervision and moti
- Maintained chemical / laboratory equipment inventory and budget planning for a chemistry laboratory.

Developed and utilized demonstrations to stimulate and motivate students...

Interviewed teaching candidates and coordinated courses with other department

#### members.

Utilized computer assisted instruction in the lab and library including CD-ROM and

#### Internet.

- Introduced new laboratory and audiovisual equipment into teaching.
- Science department head, Pinewood School,
- Steering committee member.
- Cross country coach.
- Academic and residential life advisor.
- Skin diving and scube diving
  - Executive member of Sierra Club Miami Group Board, Secretary Corresponding member of Sierra Club National Parks Committee

# PROFESSIONAL HISTORY

Science Professor Adjunct- Barry University & Brown Mackey College (2005- ongoing)

Science Professor-Johnson and Wales University, Miami, FL, (1997 ongoing)

Science Teacher-Archbishop Carroll High School, Miami, FL, Biology (1998-1999)

Science Teacher-Allison Academy and Mesivta High School, Miami inc. Chemistry, FL (1997-1998)

Science Teacher - Public and private schools in the US and overseas. (1975-1997)

#### **EDUCATION**

Nova Southeastern University & Florida International University

Graduate courses in Environmental Science towards Phd

Southern Oregon State College

Master of Science in Biology/ Education

West Midlands College of Education, Walsall, England

Postgraduate Certificate in Education

Hatfield Polytechnic

Bachelor of Science in Biochemistry

R Stephen Mahoney Page 1

**From:** Debbie Matthews [DMatthews@de-simone.com]

Sent: Monday, October 15, 2007 1:43 PM

To: Guerra, Cynthia (DERM)

Subject: Environmentally Endangered Lands Committee Dade County -Robert Stephen Mahoney

Robert Stephen Mahoney has been an active Sierra Club Miami Group for many years. He serves on our Executive Committee (EXCOM) as Secretary and has written many articles for our monthly newsletter Causeways. He attended the Climate Summit Conference that our Governor Charlie Crist organized this year, as well as several other conferences, meetings on Environmental issues. He is also a corresponding member of the Sierra Club National Parks committee.

Stephen Mahoney is a valued member of the Miami Sierra Club. He attends countless meetings and is very active in our efforts to keep our members informed of any environmental issues that are important in our community. Stephen would be a valued member of the Environmentally Endangered Lands Committee.

Sincerely,

Debbie Matthews Sierra Club Miami Group Chair

#### **Deborah Matthews**

**Executive Assistant** 

#### **DESIMONE CONSULTING ENGINEERS**

800 Brickell Avenue, 6th Floor Miami, FL 33131

T: 305.441.0755 F: 305.447.9023

**DESIMONE CONSULTING ENGINEERS** 

#### LYNETTE CARDOCH, Ph.D.

SUPERVISING SCIENTIST MWH AMERICAS, INC. 2655 LE JEUNE ROAD, SUITE 320 CORAL GABLES, FL 33134 Mobile: 786.417.5111

Email: Lynette.cardoch@mwhglobal.com

#### **EDUCATION**

#### Louisiana State University, Baton Rouge, LA

Ph.D., Oceanography and Coastal Sciences, August 2000 (Advisor: John W. Day, Ph.D) Board of Regents Graduate Fellow Dissertation: Approaches to Sustainable Management of Deltas: Integrating Natural System Functions with Societal Needs in the Mississippi and Ebro Deltas

# Fulbright Scholar, Universitat Autonoma de Barcelona, Bellaterra, Spain

Focus: Ecology and ecological economics of the Ebro Delta (1998-1999)

#### Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL M.A. Marine Affairs and Policy, 1994

Thesis: Land Use Management in South Florida: A Tool for Ecosystem Management.

#### Harvard College, Cambridge, MA

A.B. Cum Laude, Biological Anthropology, 1992

#### RECENT RESEARCH AND PROFESSIONAL EXPERIENCE

#### MWH, Americas, Inc. Coral Gables, FL

Supervising Scientist, Sustainable Development

January 2007 - Present

Global coordinator for company's interntional commitment on climate change. This includes carbon footprinting, client workshops, and middle-school educational outreach. Senior technical lead for impacts of climate change on local communities and water supply/water treatment infrastructure. Lead ecologist for utilization of wetlands for tertiary wastewater treatment.

#### BEM Systems, West Palm Beach, FL

October 2005 – January 2007

Principal Scientist, Senior Supervising Scientist

- Mississippi River Gulf Outlet (MRGO) Proposed Shoreline Stabilization Environmental Impact Statement. US Army Corps of Engineers, Project Manager. Led team of scientists, engineers and environmental compliance specialists to assess environmental impact of proposed shoreline stabilization features along the MRGO. Proposed actions include placement of articulated concrete mattresses and/or rock dikes. Particular attention on potential use of dredged materials for marsh creation and stabilization along deteriorating
- wetlands. Worked closely with USACE MVN biologists and engineers to compile necessary information and ensure NEPA compliance.

Lynette Cardoch, Ph.D

- Lake Okeechobee Sediment Quality Mapping Study. South Florida Water Management District, Project Manager. Conducted sediment mapping study on distribution of fine-grain muds on the lake bottom due to redistribution from hurricane impacts. Investigation includes sediment collection and analysis for nutrient and metals content as well as a comparison to previous studies. Results will be used in determining potential management options for lake level and nutrient management. Options include potential dredging of nutrient hot-spots.
- Kissimmee River Restoration Project Biological Support. South Florida Water Management District. QA/QC Manager. Responsible for senior quality assurance/quality control of all deliverables produced as part of 2-year contract to provide biological field and office support. Project evaluates the effects of a large-scale multi-year river and floodplain restoration.
- Options for Accelerated Recovery of Impacted Areas of the Everglades. South Florida Water Management District, Senior Scientist. Developed a conceptual model framework incorporating Bayesian probability approaches to integrate results from two large-scale research projects. Effort designed to facilitate evaluation of restoration management alternatives.

#### Parsons Water & Infrastructure, Miami, FL

October 2003 – September 2005

Principal Scientist, Water Resources Division

- Santo Domingo Port Redevelopment Master Plan: Engaged in multi-use port and tourism redevelopment master plan for a private investor in the Dominican Republic. Focus is primarily on water quality in the Rio Ozama, water supply and wastewater sanitation services, and channel navigation and safety.
- Ecological and technical director for environmental restoration projects (SFWMD Acceler8 Projects). Also coordinated contract and subcontract scopes of work.
- Prepared Final Concept Plan Report for the reviewing regulatory agencies for an
  environmental park component of the Old South Dade Landfill Closure Enhancement Project
  in Miami, FL. Plans were based on the utilization of "Green Building Technology" in its
  design, materials, and construction for hardscape features and Xeriscape for landscape
  features.

# U.S. Environmental Protection Agency, Research Triangle Park, NC September 2000 - 2003 Ecologist, Post-Doctoral Fellowship, National Risk Management Research Laboratory

- Designed and implemented methodology and sampling design for measuring air emissions over water in the Neuse River Basin. Study designed to link water quality to air quality by investigating the transformation of waterborne nitrogen to emissions of nitrous oxide gas.
- Coordinated multi-agency and stakeholder research in coastal zone.
- Served as ecological advisor to engineering group on assessments of new transportation and energy technologies.

# Louisiana State University, Baton Rouge, LA

August 1996 - 2000

Board of Regents Fellow, Coastal Ecology Institute

Utilized output from a landscape model (CELSS model) to design and investigate use
of ecological indicators—based on net primary productivity (NPP)—to determine
health of deltaic environments. Scenarios combined varied inputs of freshwater,
nutrients, and sediments into coastal wetlands. Also determined portion of human
appropriation on NPP to determine anthropogenic impacts to Louisiana wetlands.

Lynette Cardoch, Ph.D

- Conducted energy analyses to determine non-market values of the Mississippi Delta.
- Researched ecological and economic benefits of using wetlands for tertiary wastewater treatment. Studied nutrient uptake in coastal wetlands that where river flow was re-introduced.
- Performed avoided-cost economic analysis of using wetlands for treatment of seafood processing wastewater.

# Universitat Autonoma de Barcelona, Bellaterra, Spain

September 1999 - July 2000

- Fulbright Scholar
- Investigated changes in net primary productivity (NPP) in the Ebro Delta, Spain from 1860 to the present and compared with changes in the Mississippi River Delta, USA
- Determined levels of human appropriation of NPP

#### NOAA Restoration Center, Silver Spring, MD

February 1995 - February 1996

Knauss Fellow in Marine Policy, National Marine Fisheries Service, Office of Habitat Protection

- Represented NMFS on technical advisory committee for New Bedford Harbor (MA) restoration project
- Surveyed techniques of ecological restoration for standardization in order to streamline NEPA approval process
- Wrote environmental assessment reports for restoration projects in coastal ecosystems

Rosenstiel School of Marine & Atmospheric Science, University of Miami, Miami, FL Research Associate and Conference Coordinator, Latin American Mangrove Management Workshops

1993-1995

- Coordinated international resource management workshop held in Miami and Panama
- Led case studies of restoration sites in South Florida
- Assisted in editing, translating (Spanish-English), and publishing conference proceedings

Research Assistant, U.S. Man and the Biosphere, Human-Dominated System (HDS) subgroup

- Member of the HDS for the Everglades Biosphere Reserve
- Conducted study on land use patterns in South Florida using information generated from remotely sensed data and geographical information systems. Research involved groundtruthing of geographical information and analysis of land use policies.

Research Assistant, Integrated Coastal Zone Management

• Researched and summarized international policy initiatives and actions concerning integrated coastal zone management for Yearbook of International Environmental Law.

#### University of North Carolina, Greensboro, NC

Summer 1991

Summer Scholar, Human Development Research Institute

- Conducted anatomic study of gravid fish ovaries to determine possible different reproductive strategies from three different populations of teleost, *Ogilbia cayorum*
- Performed laboratory analyses to compare populations with fieldwork in the Florida Kevs

#### AWARDS AND FELLOWSHIPS/HONORS

Dissertation Symposium for the Advancement of Coastal, Estuarine, and Great Lakes Science, N	OAA	2002
Superior Accomplishment Recognition Award, EPA		2002
On-The-Spot Awards (2), EPA		
(One for new research design, another for student mentoring)		2001
Post-Doctoral Award, Environmental Protection Agency	2000	0-2003
Board of Regents Graduate Fellowship, Louisiana State University	1996	5-2000
Fulbright Scholar, US-Spain Fulbright Commission	19	98-99
Knauss Fellowship in Marine Policy (NOAA)	19	95-96
Award for Academic Merit, University of Miami		1994
Cum Laude, Harvard College		1992
Scholarship, Human Development Research Institute, University of North Carolina		1991

#### PROFESSIONAL SOCIETIES

South Florida Association for Environmental Professionals

(Vice-President 2006 & 2007, Board Member 2005)

Science Committee Member for Miami-Dade County's Climate Change Advisory Task Force (2007)

Board Member, Council for Sustainable Florida (2007-2010)

Reviewer: Ecological Economics, Estuaries

Marine Environmental Researchers (President, 1997)

Estuarine Research Federation

Society for Ecological Restoration

Association for Women in Science

**Ecological Society of America** 

#### LANGUAGES

Native Spanish speaker, proficient in French

#### **TRAVEL**

Western and Central Europe, Morocco, Central and South America, the Caribbean, the Bahamas, Mexico, Canada, Thailand, Australia, Viet Nam, Cambodia

#### **PUBLICATIONS**

#### PEER-REVIEWED JOURNALS

- Cardoch, J. W. Day, and C. Ibañez. 2002. Net primary productivity as indicator of sustainability in the Ebro and Mississippi Deltas. Ecological Applications (12): 1044-1055.
- Cardoch, L. and J. W. Day. 2002. Biophysical energy analysis of non-market values of the Ebro Delta, Spain. Journal of Coastal Conservation (8): 87-96.
- Cardoch, L. and J. W. Day. 2001. Energy analysis of nonmarket values of the Mississippi Delta. Environmental Management (28): 677-685.
- Cardoch, L. J. W. Day, Jr. J. M. Rybczyk, G. P. Kemp. 2000. An economic analysis of using wetlands for treatment of shrimp processing wastewater: A case study in Dulac, Louisiana. Ecological Economics (33): 91-102.

Lynette Cardoch, Ph.D

- Day, Jr. J.W., J.F. Martin, L. Cardoch, and P.H. Templet. 1997. System functioning as the basis for sustainable management of deltaic ecosystems. Coastal Management (25): 115-154.
- Stow, C.A., Walker, J.T., Cardoch, L., Spence, P., and C. Geron. 2005. N<sub>2</sub>O Emissions from Streams in the Neuse River Watershed, North Carolina. Environmental Science & Technology (39): 6009-7004.
- Montague, J.R., L. Ortiz, A. Arguelles, J.M. Millan, and L. Cardoch. 1988. Density and dispersion estimates for sea urchins in a South Florida seagrass community. Florida Scientist Quarterly Journal (51): 19-22.

#### **CONFERENCE PROCEEDINGS**

- Day, Jr., J.W., J. M. Rybczyk, L. Cardoch, W. Conner, P. Delgado-Sanchez, R. Pratt,
  A.Westphal. 2000. A review of recent studies of the ecological and economic aspects of the application of secondarily treated municipal effluent to wetlands in Southern Louisiana. In Recent Research in Southern Louisiana, 3-5 February 1998, Lafayette, LA. Eds. Rozas, L. P., J. A. Nyman, C. E. Proffitt, N. N. Rabalais, D. J. Reed, and R. E. Turner.
- Methodology & Approaches to the Problems of High Complexity, EVE Workshop Report. Barcelona, January 9-10, 1999. Compiled by L. Cardoch and G. Munda. Edited by C. Carter and C. L. Spash, Concerted Action: Environmental Valuation in Europe (EVE), by the DGXII European Commission, Environment and Climate RTD Programme.
- Day, J. W., Cardoch, L., Rybczyk, J. M., and Conner, W. 1999. An ecological and economic overview of wetland wastewater assimilation in coastal Louisiana. In Wetlands & Remediation: An International Conference Salt Lake City, Utah, pp. 169-170.
- Ko, J.Y., J. F. Martin, L. Cardoch, J. W. Day. 1999. An energy efficiency analysis of wetland wastewater treatment in Louisiana. Proceedings of State of the State Conference IV. Sponsored by the Environmental Research Consortium of Louisiana, Inc. New Orleans, LA. (Abstract)

#### BOOK CHAPTERS, REPORTS, ADDITIONAL PUBLICATIONS

- Daoust, R. J. and L. Cardoch. 2005. Integration of the CHIP and Fire projects: A framework to develop a probability based conceptual model. In: Daoust, R. J. (ed.). Options for Accelerating Recovery of Phosphorus Impacted Areas of the Florida Everglades Research Plan. Contract C15969-WO-06. BEM Systems, Inc. Submitted to South Florida Water Management District, West Palm Beach, FL.
- Day, J. W., L. Cardoch, J.M. Rybczyk, and G. P. Kemp, 1998. Food processor and community development of rural coastal areas through the application of the wetland wastewater treatment systems. Coastal Ecology Institute, Louisiana State University, Baton Rouge. Submitted to the National Coastal Resources Research and Development Institute.
- Cardoch, L. 1997. Environmental Piracy: Slaughtering the Resources. Scuba Times (18) pp. 46a-b.

Suman, D.O. and L. Cardoch. 1996. Coastal Zone Management. In G. Handl (ed) Yearbook of International

Environmental Law (6): 322-330. Clarendon Press: Oxford.

Suman, D.O. and L. Cardoch. 1995. Coastal Zone Management. In G. Handl (ed) Yearbook of International Environmental Law (5): 251-257. Clarendon Press: Oxford.

#### CONFERENCE PRESENTATIONS

Cardoch, L. Coastal Issues to Sustainable Development in South Florida. Workshop Series on Sustainable Solutions to Coastal Climate Change: Fundamental Challenges for Sustainable Development in the South Florida Region. City of Doral, FL. January 22, 2007.

Cardoch, L. and J. Day. Energy Analyses of Louisiana Restoration. 3rd National Conference on Coastal and Estuarine Habitat Restoration. New Orleans, LA. December 9-13, 2006.

Cardoch, L. Linking water quality to global climate change. Global Climate Change: Implications for South Florida's Future. South Florida Association of Environmental Professionals. January 20, 2006.

Moderator, Session on "Natural Systems: Coastal Zone". Global Climate Change: Implications for South Florida's Future. South Florida Association of Environmental Professionals. January 20, 2006.

- Moderator, Session on "Physical and Biological Interactions". 18<sup>th</sup> Biennial Conference of the Estuarine Research Federation. Norfolk, VA. October 16 20, 2005.
- Moderator, Session on "Effective Science Communication—Dueling Data". National Conference on Ecosystem Restoration, Lake Buena Vista, Florida. December 6-10, 2004.
- Cardoch, L. Emissions of N<sub>2</sub>O the Neuse River Basin (Interactive poster session). 17<sup>th</sup> Biennial Conference of the Estuarine Research Federation. Seattle, WA. September 14 18, 2003.
- Cardoch, L. Approaches to Sustainable Management of the Ebro Delta. Dissertation Symposium for the Advancement of Coastal, Estuarine, and Great Lakes Science. Funded by NOAA and the Inter-American Institute for Global Change Research. Guanica, Puerto Rico. October 28-November 2, 2002.
- Cardoch, L. Production of nitrous oxide in NC waterbodies (poster). N2001: The Second International Nitrogen Conference. Potomac, MD. October 14-18, 2001.
- Cardoch, L. Emissions of nitrous oxide from rivers and streams in the Neuse River Basin (poster). 16<sup>th</sup> Biennial Conference of the Estuarine Research Federation. St. Pete Beach, FL. November 4-8, 2001.
- Cardoch, L. J. W. Day, J. F. Martin, C. Ibanez, J. Y. Ko. 1999. Human appropriation of net primary productivity in the Mississippi and Ebro Deltas: Implications for sustainable development. 15<sup>th</sup> Biennial Conference of the Estuarine Research Federation. New Orleans, LA. September 25-30, 1999.

- Ko, J.Y., J. F. Martin, L. Cardoch, J. W. Day. 1999. An energy efficiency analysis of wetland wastewater treatment in Louisiana. 15<sup>th</sup> Biennial Conference of the Estuarine Research Federation. New Orleans, LA. September 25-30, 1999.
- Day, Jr., J.W., J. M. Rybczyk, L. Cardoch, W. Conner, P. Delgado-Sanchez, R. Pratt, A. Westphal. A review of recent studies of the ecological and economic aspects of the application of secondarily treated municipal effluent to wetlands in Southern Louisiana. Recent Research in Southern Louisiana Conference, Lafayette, LA, February 6-8, 1998.

#### **TEACHING EXPERIENCE**

ECO Advisor Environmental Careers Organization, U.S. EPA, 2001-2003

 Supervised summer interns on analytical laboratory procedures, assigned background reading, and directed student presentations

Teaching Assistant Wetlands for Wastewater Treatment, LSU, Fall 1999

 Taught section and led lectures on ecological and economic benefits of using wetlands for wastewater treatment

Seminar Coordinator Economic Valuation & Ecological Economics, LSU, 1997-1998

- Designed a special interest seminar series for students and faculty
- Organized syllabus, assigned readings, and led lectures

Teaching Assistant Field Course in Marine Ecology, Global Green Marine, Inc., the Bahamas, Spring 1996

- Teaching assistant for marine ecology course taught for international students
- Lectured on seagrass and mangrove ecosystems

From: Carter, Kevin [KCARTER@broward.org]
Sent: Tuesday, October 02, 2007 1:48 PM

To: Guerra, Cynthia (DERM)

Cc: Lynette Cardoch

Subject: Dr. Lynette Cardoch reference letter

Attachments: kcsfaep.pdf

Ms. Guerra,

Good afternoon. My name is Kevin Carter and I am President of the South Florida Association of Environmental Professionals. Please find the attached letter of reference for Dr. Lynette Cardoch's appointment to the Miami-Dade County Environmentally Endangered Lands (EEL) Program - Land Acquisition Selection Committee (LASC). As you will see from the letter, Dr. Cardoch has been a major factor in the success of our organization since she joined the Board three years ago and would be a great addition to your committee.

I understand you need this relatively soon, so I am sending this scanned copy to expedite your process. Please let me know if you would also like the hard copy mailed to you. Also, please feel free to contact me if you have any questions or comments at 954-519-1477 or <a href="mailto:kcarter@broward.org">kcarter@broward.org</a>

Thank you and have a great day!

Kevin Carter, President South Florida Association of Environmental Professionals



Ms. Cynthia Guerra
Environmental Resources Project Supervisor
Miami-Dade County Department of Environmental Resources Management
701 N.W. 1 Ct.; Miami, Fl. 33136

10/02/07

Dear Ms. Guerra,

On behalf of the South Florida Association of Environmental Professionals (SFAEP), I am writing this letter of reference and support for Dr. Lynette Cardoch as a candidate for the Miami-Dade County Environmentally Endangered Lands (EEL) Program - Land Acquisition Selection Committee (LASC). Dr. Cardoch has been a vital member of the SFAEP Board for the last three years, especially serving as our Vice-President for two years. She and I have, in effect, been 'dual Presidents' as her efforts for our organization have been tremendous and beyond the duties of a typical Vice-President. She has been at the forefront of our SFAEP's efforts to promote technical excellence, ethical practice, and community awareness for south Florida environmental professionals.

The SFAEP's mission includes participation in environmentally related community projects and events in Miami-Dade and Broward Counties. We also strive to provide a forum for the environmentally significant issues of the day. During her tenure, our most successful luncheon meetings have occurred including with guest speakers she invited. Working as a team, our last two annual conferences brought in over 450 people combined to learn more about issues as diverse as global climate change to alternative water supply. During the planning and implementation of these events, Dr. Cardoch is always a person our organization has known as a "go to person" to get things accomplished in a professional and timely manner. She is also excellent on working towards building consensus within our Board. I believe she will bring all these positive traits to the EEL's-LASC.

In closing, I wish your program and committee much success in your nomination process. Please visit our web site at <a href="www.sfaep.org">www.sfaep.org</a> to find out more about SFAEP. Please also feel free to contact me at 954-519-1477 or <a href="kcarter@broward.org">kcarter@broward.org</a> if you have any questions or comments.

Sincerely,

Kevin Carter, President

September 24, 2007

Patricia L. Phares (Patty) 17615 SW 119 Ave Miami FL 33177 305-255-6404 h 305-361-4277 w pphares@mindspring.com

#### **Environmental and Civic Involvement**

## Dade Chapter of the Florida Native Plant Society

Member, volunteer for most chapter projects and events, regular attendee of monthly meetings and field trips, 1981-present

Newsletter editor, most years 1986-present

Native Plant Day committee, 1990-present (annual public educational event)

Everglades National Park Coe Visitors Center Landscaping Project steering committee, 2001-present

(ongoing planning of the work to be done and coordinating the bi-monthly

workdays)

Chapter president, 1988-1994

Chapter board, 1985-1988

Chapter board advisor, 1994-present

State FNPS Conference Co-chair, 1990 and 2000

Green Palmetto Award for service from the Florida Native Plant Society, 2000

# Fairchild Tropical Botanic Garden Conservation Program volunteer

Rare Plant S.W.A.T. ("So-long, Weeds and Trash) Team - removing invasive exotics from rare fern habitat,

2004-2005.

Outplantings of rare plants, 2002-present.

#### Returned Peace Corps Volunteers of South Florida

Member, 1986-present; volunteer Board member, 2006-present

#### **Tropical Audubon Society**

Member, 1990-present; volunteer

# Trees for Dade (predecessor of TREEmendous Miami)

Board of Directors, 1991-1999

Cool Communities planting volunteer, 1997-1999

#### Miami Bridge

Volunteer at youth shelter 1985-1986

#### Other organizations

Friends of the Gifford Arboretum (University of Miami), member 2000-present Friends of The Institute for Regional Conservation, member 2004-present; volunteer North American Butterfly Association, Miami Blue Chapter member, 2004-present; volunteer

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The Nature Conservancy member, 1987-present Miami-Dade College Community Chorus member, 1985-present

#### **Education**

Master of Statistics, University of Florida, 1977 MA, Mathematics, University of Florida, 1972 BA, Mathematics, Hanover College (Hanover, Indiana), 1970 Botany courses, Miami Dade College, 1992

#### **Employment**

Contractor at NOAA Fisheries, Miami (short-term contract beginning August 2007)
Volunteer at NOAA Fisheries, Miami, March 2007-August 2007
Statistician, NOAA Fisheries (Galveston, TX, and Miami), 1977-February 2007
Graduate student assistant, Department of Statistics, University of Florida, 1975-1977
Peace Corps Volunteer, Western Samoa (math and social studies teacher, junior high school), 1973-1974

Graduate student assistant, Department of Mathematics, University of Florida, 1970-1972 Student assistant, Department of Mathematics, Hanover College, 1976-1970

### Guerra, Cynthia (DERM)

From: smwood [smwood@bellsouth.net]
Sent: Tuesday, September 25, 2007 8:35 AM

To: Guerra, Cynthia (DERM)

Cc: Patty Phares home

Subject: LASC committee recommendation

Dear Ms. Guerra,

I realize that there are now openings for the Land Acquisition Selection Committee. I am writing to you to recommend Patty Phares for a position on this committee. Ms. Phares has been a long time advocate for conservation in South Florida. She has been involved with the Florida Native Plant Society since the 1980's and has been active since joining. She is a responsible individual capable with handling several tasks at once while still managing to do a superb job on each one. She is familiar with South Florida having lived in Dade County for several decades, and is also familiar with the native and rare habitats here. I certainly endorse her acceptance to the committee.

If you have any questions, please feel free to contact me.

Sincerely, Steven W. Woodmansee Past-President, Dade Chapter Florida Native Plant Society

Co-Chair, Native Plant Workshop Senior Biologist, The Institute for Regional Conservation